

10. (Twice Amended) A system comprising:  
an image server at a first location storing a source medical image;  
a remote view station at a second location communicatively coupled to the image server to receive a compressed version of the source medical image, said remote view station comprising a decoder operative to decompress the compressed medical image,  
BB wherein the remote view station includes an input device for selecting a region of the decompressed medical image, and further wherein the image server applies an image analysis operation on a region of the source medical image that corresponds to the selected region of the decompressed medical image.

15. (Twice Amended) A computer program, tangibly stored on a computer-readable medium, comprising instructions operable to cause a programmable processor to:

BB generate a compressed medical image from a source medical image at a first location;

transmit the compressed medical image to a remote view station at a second location for display;

receive at the first location region information from the remote view station, wherein the region information defines a region within a decompressed medical image generated from the compressed medical image; and

apply image analysis operations to a region of the source medical image at the first location as a function of the region information.

Sub C15  
B4 23. (Twice Amended) A method comprising:

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Concl. compressing a source medical image at a first compression level at a first location;

transmitting the compressed medical image to a remote view station at a second location for display;

receiving at the first location region information separate from a decompressed medical image from the remote view station, said decompressed medical image generated from the compressed medical image at the remote view station, wherein the region information defines a region of the decompressed medical image; and

CDN's compressing a region of the source medical image at a second compression level at the first location as a function of the region information, wherein the second compression level results in less information loss than the first compression level.

24. (Amended) The method of claim 23 wherein transmitting the compressed medical image includes transmitting the compressed medical image over a global packet-switched network.